

STATE OF CALIFORNIA

FACT SHEET

**WASTE DISCHARGE REQUIREMENTS ORDER NO. R1-2003-0059
NPDES PERMIT NO. CA0023655**

FOR

**SONOMA WEST HOLDINGS, INCORPORATED,
WASTEWATER TREATMENT FACILITY, PLANT NO. 2**

Permit Type:

National Pollutant Discharge Elimination System (NPDES) Permit

Permit Number:

CA0023655

Permittee:

Sonoma West Holdings, Incorporated

ID No. 1B81202OSON

Permitting Authority:

**Regional Water Quality Control Board
North Coast Region
5550 Skylane Boulevard, Suite A
Santa Rosa, CA 95403**

November 5, 2003

SUMMARY

The California Regional Water Quality Control Board, North Coast Region (Regional Water Board) is proposing to renew Waste Discharge Requirements (NPDES Permit No. CA0023655) for Sonoma West Holdings, Incorporated (Permittee) for the discharge of industrial wastewater to land and to Barlow Creek, and the discharge of domestic wastewater to land from the Permittee's facility (Facility). The renewed Permit will be effective for five years and has an expiration date of November 5, 2008.

This fact sheet explains the nature of the proposed discharge, and the regulatory and technical basis for effluent and receiving water limitations, discharge prohibitions, and other permit conditions and requirements.

PUBLIC INVOLVEMENT OPPORTUNITY

The Regional Water Board is considering the issuance of Waste Discharge Requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) Permit for the Facility. As an initial step in the process, Regional Water Board staff have developed tentative WDRs and is encouraging public participation in the WDR adoption process.

Interested persons are invited to comment on the draft WDRs. Comments on the draft WDRs will be received for thirty days following the publication of the notice in the Santa Rosa Press Democrat newspaper.

All written comments submitted during the comment period will be retained at the Regional Water Board and considered in making the final decision on the application for the Permit. The Regional Water Board will provide copies of the application, the draft WDRs and the fact sheet upon request. Persons who submit written comments will be notified of the final decision.

The Regional Water Board will hold a public hearing to consider the issue on November 5, 2003, at:

Regional Water Quality Control Board Office
5550 Skylane Boulevard, Suite A
Santa Rosa, CA 95403

Please submit written comments to the Regional Water Board at the above address, to the attention of Ms. Mona Dougherty. To be timely, written comments must be received by the Regional Water Board no later than October 20, 2003.

BACKGROUND INFORMATION

Location and Facility Description

The Facility is located at 2064 Highway 116 North in the community of Sebastopol, in the NW ¼ and SW ¼ of Section 27, T7N, R9W.

The Permittee previously operated this Facility as an apple processing facility under the name of the Vacu-Dry Company. When operating, the Vacu-Dry Facility processed approximately 650 tons of dehydrated apples and juice concentrate per day. The process wastewater treatment system was specifically designed and operated for this type of activity and used land application as the primary disposal method. When operating as an apple processing facility, the average process wastewater flow was 175,000 gallons per day (gpd) with maximum flows up to 370,000 gpd. The receiving water for the discharge is Barlow Creek.

In 1999, the Vacu-Dry Company sold its proprietary process and ceased apple processing. Since then, the Permittee has marketed the Facility as a multi-tenant food and beverage processing facility and has leased space to several commercial enterprises. As of January 2003, the Facility had eight tenants that cumulatively generated an average flow of 5,000 gallons per day with a maximum of 11,000 gpd (as indicated in a letter dated November 19, 2002 to the Regional Water Board). Of the eight tenants, six are wineries, one is a beverage producer, and one is a specialty pea and rice dehydrated chip processor. Peak flows are generated during the fall months corresponding with the local grape harvest. The Permittee has performed a water balance analysis and estimated the capacity of the Facility as a peak daily flow of 368,000 gpd and an average daily flow during the peak harvest month of 173,000 gpd.

Domestic Wastewater Treatment System. The Permittee's domestic wastewater treatment system is designed to provide treatment for a peak flow of 6,000 gpd and an average flow of 2,720 gpd equivalent to a peak employee day of 400 full-time employees. Treatment includes four septic tanks and an aerated domestic wastewater pond. Treated wastewater is currently retained within the aerated domestic wastewater pond. In the future, the Permittee intends to pump the wastewater from the domestic wastewater pond to a spray irrigation system located on Bench No. 1. Any runoff (tailwater) from Bench No. 1 will be collected along its downgradient terminus by a constructed berm and allowed to percolate and/or evaporate.

The Permittee has complied with all Water Quality Control Plan, North Coast Region (Basin Plan) setback requirements, has completed application and percolation tests to determine the appropriate application rates, and will construct the downgradient berm to ensure that tailwater is not commingled with process wastewater tailwater from the other benches. To ensure compliance with the coliform bacteria effluent limitations, the Permittee has proposed to install an effluent filter on the end of the fourth septic tank and chlorine disinfection equipment. These additions to the treatment system must be completed prior to the initiation of land application of domestic wastewater.

Industrial Process Wastewater Treatment System. The process wastewater treatment system is comprised of a segregated process wastewater collection sewer within each building, a centralized collection sump, rotary screen for large solids removal, a second settling sump equipped with an overflow weir, and a third sump where oil and grease can be removed, if necessary. Process wastewater flows by gravity from the third sump to an irrigation sump and pumped to overland flow treatment fields, followed by an aerated primary treatment pond (transfer pond) and an aerated storage pond.

The Permittee uses seven benches for wastewater treatment and land application purposes. Bench Nos. 1, 2, 3, and 7 are operated as primary benches. The total area of the primary benches is 16.2 acres. These benches are used as overland flow treatment fields included in the wastewater treatment process. Tailwater from Benches Nos. 1, 2, and 3 gravity flows to the transfer pond while tailwater from Bench 7 requires pumping. From the transfer pond, process wastewater can be pumped either to the primary benches, secondary benches or to the aerated storage pond. Benches Nos. 4, 5, and 6 are secondary benches, meaning flows directed to these benches have been previously applied to one of the primary benches and recollected as tailwater. The total area of the secondary benches is approximately 7.6 acres. Tailwater from all secondary benches is pumped to the aerated storage pond. All benches are used to grow pasture grasses and are principally used during the summer dry season when direct discharge to Barlow Creek is prohibited. During times of heavy precipitation or when the benches are saturated, process wastewater is pumped directly to the storage pond. Provisions governing the application of process wastewater have been included in this Permit.

The 6-acre storage pond (Lake Davis) has a capacity of 15 million gallons and is equipped with an aeration system. Process wastewater collected in the storage pond can be disposed of in two ways. Process wastewater can flow by gravity back to the transfer pond where it can be pumped to either the primary or secondary benches for irrigation or, during the wet season of the year, treated effluent in compliance with Permit conditions may be discharged directly to Barlow Creek. At the current rate of wastewater generation, the Facility appears to have more than sufficient capacity to hold all process wastewater generated during both the dry and wet seasons, with the possible exception of extreme storm events.

Cold Storage Defrost Water. The Facility also has a large cold storage facility. The cold storage facility is not currently in use and, therefore, cannot be defrosted at this time. The cold storage area may require occasional defrosting in the future and the Facility has dedicated piping that directs the defrost water directly to Barlow Creek. This discharge directly to Barlow Creek is prohibited. As the cold storage defrost water, at this time, cannot be analyzed for reasonable potential to contribute to a violation of State water quality objectives, the cold storage defrost water shall be discharged to Lake Davis and commingled with the process wastewater. As the cold storage defrost water flow is significantly less than the flow of process wastewater, the addition of the cold storage defrost water will be insignificant. This will also ensure that the cold storage defrost water meets the effluent limits for the CTR constituents for which the process wastewater had reasonable potential. At peak operational capacity, up to 20,000 gpd can be generated. Analytical results provided in the Report of Waste Discharge show that samples of the defrost water contain 3.7 mg/l of Chemical Oxygen Demand (COD), 3.1 mg/l of Total Organic Carbon (TOC), 0.3 mg/l of Total Suspended Solids (TSS), and 0.1 mg/l of Ammonia (as N). Temperatures ranged between 11.6 °C in winter to 17.1 °C in summer.

Effluent from the on-site storage pond and cold storage defrosting are discharged via Outfall No. 001 to Barlow Creek, tributary to Atascadero Creek, tributary to Green Valley Creek, and thence to the Russian River, all waters of the United States. The points of discharge of process wastewater are located at Latitude 38° 25' 22" North; Longitude 122° 51' 04" West. Direct discharge from Outfall 001 to Barlow Creek is prohibited during the summer dry season (May 15 through September 30) and from October 1 through May 14 is limited to only excess wastewater as needed to safely operate the storage pond.

The previous Permit established nine distinct outfalls (Outfalls 001 - 009) to the irrigated benches and Barlow Creek and its tributaries. This Permit reduces the number of authorized outfalls to three (001, 002 and 003). The other six discharge locations were previously used for currently prohibited discharges or for stormwater discharges and are not regulated by this Permit. This Permit prohibits the surface water discharge of treated domestic wastewater. The authorized discharges are described as follows:

- a. Discharge Serial 001 Outfall for discharge of treated process wastewater from Lake Davis to Barlow Creek.
- b. Discharge Serial 002 Discharge of treated process wastewater to Bench Nos. 1, 2, 3, 4, 5, 6 and 7.
- c. Discharge Serial 003 Discharge of treated domestic wastewater to Bench No. 1.

DESCRIPTION OF EFFLUENT

Waste Discharge Requirements Order No. 94-7, adopted by Regional Water Board on August 25, 1994, currently regulates the discharge from the Facility. Previous process wastewater characterization data for discharges from the Facility are representative of past operations at the Facility, i.e., apple processing versus the current multi-tenant food and beverage processing facility.

GENERAL RATIONALE

The following documents served as the bases for the requirements contained in the Permit, and are referred to under the specific rationale section of this Fact Sheet.

1. Federal Water Pollution Control Act, as amended (hereinafter the Clean Water Act or CWA). The CWA requires point source discharges to control conventional, nonconventional, and toxic pollutants that are discharged into the waters of the United States. The control of the discharge of pollutants is established through NPDES permits that contain effluent limitations and standards. The CWA establishes two principal bases for effluent limitations. First, Permittees are required to meet technology-based effluent limitations that reflect the best controls available considering costs and economic impact. Second, they are required to meet Water Quality-Based Effluent Limitations (WQBELs) that are developed to protect applicable designated uses of the receiving water and which may be more stringent than technology-based effluent limitations.

2. Federal Code of Regulations, Title 40 Protection of Environment, Chapter 1, Environmental Protection Agency, Subchapter D, Water Programs, Parts 122-129, 131 and 133 (hereinafter referred to as 40 CFR and a specific part number). These regulations provide effluent limitations for pollutants discharged.
3. National Toxics Rule (NTR) 57 FR 60848, December 22, 1992, as amended.
4. On May 18, 2000, the U.S. EPA published the *Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California* (Federal Register, Volume 65, Number 97, 18 May 2000). These standards are generally referred to as the California Toxics Rule (CTR). The CTR specifies water quality criteria (WQC) for numerous pollutants, of which the fresh water criteria are applicable to Sonoma West Holding's discharge.

The SWRCB also adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (also known as the State Implementation Policy or SIP) on March 2, 2000. The SIP applies to discharges of toxic pollutants in the inland surface waters, enclosed bays and estuaries of California subject to regulation under the State's Porter-Cologne Water Quality Control Act (Division 7 of the Water Code) and the federal Clean Water Act. The SIP establishes implementation provisions for priority pollutant criteria promulgated by the U.S. EPA through the CTR for priority pollutant objectives established in the Basin Plan.

5. State and federal antibacksliding and antidegradation policies that require Regional Water Board actions to protect the water quality of a waterbody and to ensure that the waterbody will not be further degraded. The antibacksliding provisions are specified in Section 402(o) of the CWA and in Title 40 of the Code of Federal Regulations (40 CFR), Section 122.44(l). Those provisions require a reissued permit to be as stringent as the previous permit with some exceptions where effluent limitations may be relaxed.
6. Effluent limitations are established in accordance with Sections 301, 304, 306, and 307 of the federal Water Pollution Control Act, and amendments thereto. These requirements, as they are met, will maintain and protect the beneficial uses of Barlow Creek and the Russian River.
7. Department of Health Services, Title 22, Code of Regulations, Chapter 3 (Sections 60301-60355) Water Recycling Criteria. These regulations provide effluent limitations for various recycled water uses and are necessary for the protection of human health.
8. Water Quality Control Plan for the North Coast Region (Basin Plan), adopted by the Regional Water Board on December 9, 1993. The California State Water Resources Control Board (State Water Board) approved the Basin Plan on March 21, 1994, and it was approved by the California State Office of Administrative Law on August 18, 1994. The Basin Plan defines beneficial uses and contains water quality objectives (WQOs) for waters of the state within the North Coast Region, including the Russian River and its tributaries.

The implementation plan for the North Coastal Basin in Section 4 of the Basin Plan, prohibits point source waste discharges during the period of May 15th through September 30th and whenever the waste discharge flow is greater than one percent of the receiving water flow.

The beneficial uses of the Russian River as identified in the Basin Plan are listed below. Based on the "Tributary Rule" (Basin Plan, page 2-1.00) and best professional judgment (BPJ) and based on known uses of the receiving waters in the vicinity of the discharges, the following beneficial uses also apply to Barlow Creek.

- a. municipal and domestic supply
- b. agricultural supply
- c. industrial service supply
- d. industrial process supply
- e. groundwater recharge
- f. navigation
- g. hydropower generation
- h. water contact recreation
- i. non-contact water recreation
- j. commercial and sport fishing
- k. warm freshwater habitat
- l. cold freshwater habitat
- m. migration of aquatic organisms
- n. spawning, reproduction, and/or early development
- o. estuarine habitat
- p. aquaculture

The beneficial uses of areal groundwaters include:

- a. domestic water supply
- b. agricultural water supply
- c. industrial service supply
- d. industrial process supply

To protect the beneficial uses of waters of the state, the U.S. EPA requires, at 40 CFR 122.44(d)(1)(i), that NPDES permits account for the effect of toxic pollutants in a discharge on the quality of the receiving water. For toxic pollutants, whenever a discharge causes, has reasonable potential to cause, or contributes to an excursion above a narrative or numeric water quality criteria, water quality-based effluent limitations (WQBELs) must be developed.

SPECIFIC RATIONALE

Specific factors affecting the development of limitations and requirements in the Permit are discussed as follows:

1. Recent Plant Performance

Section 402(o) of CWA and 40 CFR 122.44(l) require that WQBELs in re-issued permits be at least as stringent as in the previous Permit. The SIP specifies that interim effluent limitations, if required, must be based on current treatment facility performance or on previous permit limitations whichever is more stringent. In determining what constitutes “recent plant performance,” BPJ was used.

2. Bases for Prohibitions

a. Prohibition A.1 (no discharges other than as described in the Permit):

This prohibition is based on the Basin Plan, previous Permit and BPJ.

b. Prohibition A.2 (creation of pollution, contamination or nuisance prohibited):

This prohibition is based on Section 13050 of the California Water Code.

c. Prohibition A.3 (no discharge of waste to unpermitted land discharge points):

This prohibition is based on the previous Permit and Title 22 recycled water regulations.

d. Prohibition A.4 (no discharge of waste from unpermitted points in the wastewater treatment system):

This prohibition is based on the Basin Plan to protect beneficial uses of the receiving water from unpermitted discharges, and the intent of Sections 13260 through 13264 of the California Water Code relating to the discharge of waste to State Waters without filing for and being issued a permit.

e. Prohibition A.5 (no discharge of non-process wastewater and cold storage defrost water to the process wastewater treatment system):

This prohibition is based on the previous Permit.

f. Prohibitions A.6 (no irrigation discharge before and during rainfall events):

This prohibition is based on the previous Permit and BPJ.

- g. Prohibition A.7 (no direct discharge to surface waters of cold storage defrost water):

As the cold storage area is not being used it cannot be defrosted to monitor for the CTR constituents in compliance with the SIP.

- h. Prohibition A.8 (no discharge to surface waters from May 15 through September 30):

This prohibition is based on the Basin Plan. The Basin Plan prohibits discharges to the Russian River and its tributaries during the period May 15 through September 30 (Chapter 4, North Coastal Basin Discharge Prohibition No. 4).

- i. Prohibition A.9 (limited discharge and 100:1 dilution requirement):

The prohibition, limiting discharge to surface water to a 100:1 dilution minimum requirement is based on the Basin Plan. The Basin Plan prohibits discharges to the Russian River and its tributaries not receiving 100:1 dilution (Chapter 4, North Coastal Basin Discharge Prohibition No. 4).

- j. Prohibition A.10 (no surface water discharge of domestic wastewater):

This prohibition is based on the general objectives of the Basin Plan (no discharge unless necessary) and BPJ, and is consistent with the Basin Plan provision requiring that any municipal wastewater receive advanced treatment prior to discharge (no advanced treatment is currently available at this Facility).

- k. Prohibitions A.11 and A.12 (no discharge of domestic wastewater except to Bench 1 and no discharge requirements before and during rainfall events):

The prohibition of discharges to other benches is consistent with not allowing any surface water discharge of domestic wastewater and the prohibition before and during rainfall events is based on BPJ.

- l. Prohibition A.13 (no discharge of hazardous waste):

This prohibition is the same as the previous Permit prohibition.

3. Bases for Numerical Effluent Limitations

- a. Effluent Limitations B.1 (for discharges of process wastewater to surface water):

| <u>Constituent</u> | <u>Unit</u> | <u>Monthly Average</u> | <u>Daily Maximum</u> |
|------------------------|-------------|----------------------------|--------------------------|
| BOD (20° C, 5-day) | mg/l | | 80 |
| BOD (20° C, 5-day) | lb/day | | 525 |
| Total Suspended Solids | mg/l | | 80 |
| Total Suspended Solids | lb/day | | 837 |
| Settleable Solids | ml/l | | 0.2 |

| <u>Constituent</u> | <u>Unit</u> | <u>Monthly Average</u> | <u>Daily Maximum</u> |
|--------------------|-------------|----------------------------|--|
| Hydrogen Ion | pH Units | | Not less than 6.5 nor greater than 8.5 |
| Temperature | °C | | 27 |
| COD | mg/l | | 50 |
| Cadmium | µg/l | 1.8 | 3.7 |
| Copper | µg/l | 6.2 | 12.4 |
| Cyanide | µg/l | 4.3 | 8.5 |
| Nickel | µg/l | 38.3 | 76.9 |
| Selenium | µg/l | 4.1 | 8.2 |
| Zinc | µg/l | 53.6 | 107.5 |

- i. The concentration effluent limitations for BOD, settleable solids and total suspended solids (TSS) are based on BPJ and are consistent with the effluent limits established for BOD, TSS, and settleable solids recently developed for the Regional Water Board, Order No. R1-2002-0012, General Waste Discharge Requirements for Discharges of Winery Waste to Land. The current tenant mix at this Facility is oriented towards wine production and the other tenants are also discharging wastestreams that can be treated by the existing treatment process. The previous Permit limits for BOD and TSS in discharges to surface water were mass limits and based on the Permittee's previous classification as an apple and fruit processing facility as defined in by SIC codes 2034 Dried and Dehydrated Fruits, Vegetables, and Soup Mixes, and 2033 Canned Fruits, Vegetables, Preserves, Jams and Jellies. The mass limits are retained from the previous Permit.
- ii. The pH limit for surface water discharges is retained from the previous Permit.
- iii. The Chemical Oxygen Demand and Temperature limits are retained from the previous Permit for the discharge of cold storage defrost water to surface waters. As the Permittee shall be commingling the cold storage defrost water and process wastewater, these limits were placed on all discharges from Discharge Serial 001.
- iv. The effluent limitation for acute toxicity is based on the Basin Plan narrative toxicity water quality objective (Chapter 3) and BPJ. This effluent limitation has been included in past permits for this Facility.
- v. The effluent limitation for chronic toxicity was retained from the previous Permit and is consistent with the Basin Plan narrative toxicity water quality objective.
- vi. Effluent limitations for cadmium, copper, cyanide, nickel, selenium and zinc have been added for direct discharges to Barlow Creek, effluent monitoring in November 2002 and March 2003 detected these pollutants at concentrations above CTR criteria; i.e., reasonable potential is shown for these pollutants.

The SIP requires the following steps to determine final effluent limitations for CTR pollutants (cadmium, copper, cyanide, nickel, selenium, zinc).

- For each applicable water quality criterion/objective, an effluent concentration allowance (ECA) is calculated from the following equation to account for dilution and background levels of each pollutant.

$ECA = C + D (C - B)$, where C is the applicable water quality criterion, D is the dilution credit, and B is the ambient background concentration. Cyanide has an acute criterion of 22 µg/l and a chronic criterion of 5.2 µg/l.

Here, the Regional Water Board is allowing no credit for dilution. For each pollutant, D and B equal zero, and the ECA equals C.

- For each ECA based on an aquatic life criterion (cyanide), the long-term average discharge condition (LTA) is determined by multiplying the ECA times a factor (a multiplier) to account for effluent variability. The LTA is a target of treatment performance - a projection of the long-term average pollutant concentration from limited data.

LTA multipliers are determined based on a coefficient of variation (CV) and on a specified probability of occurrence. The CV is a measure of the relative variations of a set of data; and here, because there were fewer than 10 data points, the CV was set equal to 0.6.

From Table 1 of the SIP, the ECA multipliers for calculating LTAs at the 99th percentile occurrence probability for cyanide are 0.321 (acute multiplier) and 0.527 (chronic multiplier); and LTAs are calculated as follows.

| | ECA | | ECA Multiplier | | LTA (µg/l) | |
|---------|-------|---------|----------------|---------|------------------|-------------------|
| | Acute | Chronic | Acute | Chronic | Acute | Chronic |
| Cyanide | 22 | 5.2 | 0.321 | 0.527 | 7.06 (22 x .321) | 2.74 (5.2 x .527) |

- Using the most limiting (the lowest) LTA, water quality based effluent limitations (WQBELs) are calculated. WQBELs include an average monthly effluent limitation (AMEL) and a maximum daily effluent limitation (MDEL).

AMELs and MDELs are calculated by multiplying the most limiting LTA for each pollutant times a multiplier that accounts for averaging periods and exceedance frequencies of the criteria/objectives and the effluent limitations, and the effluent monitoring frequency. Here, the CV was set equal to 0.6 (CV = 0.6) and the sampling frequency was set equal to 4 (n = 4). If the sampling frequency is four times a month or less, the SIP states that n shall be set equal to 4. A 99th percentile occurrence probability was used to determine the MDEL multiplier and a 95th percentile occurrence probability was used to determine the AMEL multiplier. From Table 2 of the SIP, the MDEL

multiplier is 3.11, and the AMEL multiplier is 1.55. Final WQBELs for cyanide are determined as follows.

| | LTA | MDEL Multiplier | AMEL Multiplier | MDEL (µg/l) | AMEL (µg/l) |
|---------|------|--------------------|--------------------|----------------|----------------|
| Cyanide | 2.74 | 3.11 | 1.55 | 8.5 | 4.3 |

- The final WQBELs for cadmium, copper, nickel, selenium and zinc were calculated using this method.

b. Effluent Limitations B.2 (for discharge of treated domestic wastewater to irrigation Bench No. 1):

| <u>Constituent</u> | <u>Unit</u> | <u>Monthly Average</u> | <u>Daily Maximum</u> |
|--------------------------|-------------|----------------------------|--------------------------|
| BOD (20° C, 5-day) | mg/l | 50 | 80 |
| Total Suspended Solids | mg/l | 50 | 80 |
| Total Coliform Organisms | MPN | 23 | 240 |

- The effluent limitations for BOD and TSS are retained from the previous Permit. They are intended to ensure an adequate and reliable level of wastewater treatment for protection of recycled water uses. All limits apply to the discharge from the treatment plant.
 - The purpose of the total coliform organism effluent limitation is to ensure adequate disinfection of the discharge. Effluent limits are based on WQOs for bacteriological parameters. WQOs are given in terms of parameters which serve as surrogates for pathogenic organisms. The traditional parameter in this regard is coliform bacteria, either as total coliform or as fecal coliform. This Permit specifies a total coliform limit. The coliform effluent limits in the Permit are given as limits for total coliform and are based on Title 22 requirements for recycled water.
 - The purpose of the flow effluent limitation is to ensure that influent domestic wastewater flows do not exceed the design capacity of the treatment system.
- c. Effluent Limitation B.3 (for storage of wastewater in Lake Davis):

| <u>Constituent</u> | <u>Unit</u> | <u>Daily Maximum</u> |
|--------------------|-------------|--|
| BOD | mg/l | 80 |
| TSS | mg/l | 80 |
| Settleable Solids | ml/l | 1.0 |
| Hydrogen Ion | pH | Not less than 6.5 nor greater than 8.5 |

These effluent limitations are retained from the previous Permit.

4. Basis for Receiving Water Limitations (Section C. of draft Permit).

Receiving water limitations from the existing Permit are included in the draft Permit. The receiving water limitations reflect Basin Plan objectives for inland surface waters, enclosed bays, and estuaries contained in Chapter 3 of the Basin Plan.

5. Basis for Ground Water Limitations (Section D. of draft Permit)

Ground water limitations from the existing Permit are included in the draft Permit. The ground water limitations reflect Basin Plan and California Code of Regulations, Title 22, Division 4, Chapter 15, Article 5, Sections 64443 and 64445.

6. Basis for Aerated/Oxidation Pond Requirements (Section G. of draft Permit)

Aerated/Oxidation Pond Requirements are based on BPJ and are consistent with the previous Permit.

7. Basis for New Tenant Requirements (Section H. of draft Permit)

The new tenant requirements are generally consistent with the California Water Code and 40 CFR Part 122, which require Permittees to notify the Regional Water Board if there are modifications to facility operations that could effect discharge characteristics and necessitate permit modification. The specific requirements are based on BPJ and the expectation that new tenants could alter the volume and characteristics of the effluent flow.

8. Basis for Other Permit Provisions

a. Solids Disposal And Handling Provision.

The disposal or reuse of wastewater treatment screenings, sludges, or other solids removed from the liquid waste stream is regulated by 40 CFR Parts 257, 258, 501, and 503, the State Water Board promulgated provisions of Title 27, Division 2, of the California Code of Regulations, and with the Water Quality Control Plan for Ocean Waters of California (California Ocean Plan).

b. Facility Operation Provision.

40 CFR Part 122.41 (e) requires proper operation and maintenance of permitted wastewater systems and related facilities to achieve compliance with permit conditions.

c. Bypass Provision

Federal regulations (40 CFR Part 122.41(m)) generally prohibit the intentional diversion of waste streams from any portion of a treatment facility.

d. Chronic Toxicity Control Provision

Federal regulations (40 CFR Part 122.44(d)) require that effluent limitations be established for pollutants, including whole effluent toxicity, when a discharge has the reasonable potential to cause or contribute to an exceedance of the state water quality standard, including state narrative objectives for water quality.

The Permittee is required to conduct short-term tests with the water flea, *Ceriodaphnia dubia* (survival and reproduction test), the fathead minnow, *Pimephales promelas* (larval survival and growth test), and the green alga, *Selenastrum capricornutum*. Initially, the Permittee is required to determine the most sensitive test species and monitor the discharge for chronic toxicity using that species for no more than five years, whereupon, the Permittee will repeat the screening procedure to confirm the most sensitive species. If reasonable potential to exceed the narrative water quality objective is found to exist, the Permit may be reopened to include a chronic toxicity limitation, as appropriate. The Basin Plan does not at this time grant a mixing zone for this discharge. Until such time as a mixing zone is established for this parameter, reasonable potential will be based on results of chronic toxicity tests at the end of the pipe.

e. Monitoring and Reporting Program Requirements

Section 308 of the Clean Water Act and federal regulation 40 CFR 122.44(i) require monitoring in permits to determine compliance with effluent limitations. Monitoring may also be required to gather data for future effluent limitations or to monitor effluent impacts on receiving water quality. The Permittee is responsible for conducting the monitoring and for reporting results on Discharge Monitoring Reports to the EPA.